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=> file biosis caba caplus embase japio lifesci medline scisearch uspatfull
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FILE 'USPATFULL' ENTERED AT 14:07:15 ON 19 OCT 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> e andersen peter/au
E1            8     ANDERSEN PERNILLE/AU
E2            1     ANDERSEN PETE/AU
E3          349 --> ANDERSEN PETER/AU
E4            5     ANDERSEN PETER A/AU
E5            1     ANDERSEN PETER ANDREAS/AU
E6            5     ANDERSEN PETER B/AU
E7           61     ANDERSEN PETER C/AU
E8            1     ANDERSEN PETER CHRISTIAN/AU
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E10          61     ANDERSEN PETER E/AU
E11           1     ANDERSEN PETER ESKIL/AU
E12           1     ANDERSEN PETER ESKILD/AU

=> s e2-e12 and tuberculosis
L1          256 ("ANDERSEN PETE"/AU OR "ANDERSEN PETER"/AU OR "ANDERSEN PETER
                A"/AU OR "ANDERSEN PETER ANDREAS"/AU OR "ANDERSEN PETER B"/AU
                OR "ANDERSEN PETER C"/AU OR "ANDERSEN PETER CHRISTIAN"/AU OR
                "ANDERSEN PETER CRAIG"/AU OR "ANDERSEN PETER E"/AU OR "ANDERSEN
                PETER ESKIL"/AU OR "ANDERSEN PETER ESKILD"/AU) AND TUBERCULOSIS

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2           132 DUP REM L1 (124 DUPLICATES REMOVED)

=> s l2 and vaccin?
L3            91 L2 AND VACCIN?

=> s l3 and (latent)
L4             9 L3 AND (LATENT)

=> s l3 and latent
L5             9 L3 AND LATENT

=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y


L5   ANSWER 1 OF 9  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
```

AN 2004:340175 BIOSIS
DN PREV200400343460
TI Comparison of tuberculin skin test and new specific blood test in **tuberculosis** contacts.
AU Brock, Iinger; Weldingh, Karin; Lillebaek, Troels; Follmann, Frank; **Andersen, Peter** [Reprint Author]
CS Dept Infect Dis Immunol, Statens Serum Inst, Artillerivej 5, DK-2300, Copenhagen, Denmark
pa@ssi.dk
SO American Journal of Respiratory and Critical Care Medicine, (July 1 2004) Vol. 170, No. 1, pp. 65-69. print.
ISSN: 1073-449X (ISSN print).
DT Article
LA English
ED Entered STN: 11 Aug 2004
Last Updated on STN: 11 Aug 2004
AB The tuberculin skin test used to detect **latent** Mycobacterium **tuberculosis** infection has many drawbacks, and a new diagnostic test for **latent tuberculosis** (QuantiFERON-TB (QTF-TB)) has recently been introduced. This test measures the production of IFN-gamma in whole blood upon stimulation with purified protein derivative (PPD). The QTF-TB test addresses the operational problems with the tuberculin skin test, but, as the test is based on PPD, it still has a low specificity in populations **vaccinated** with the Bacile Calmette-Guerin (BCG) **vaccine**. We have modified the test to include the antigens ESAT-6 and CFP-10, which are not present in BCG **vaccine** strains or the vast majority of nontuberculous mycobacteria. This test was used to detect infection in contacts in a **tuberculosis** outbreak at a Danish high school. The majority of the contacts were BCG-unvaccinated, which allowed a direct comparison of the skin test and the novel blood test in individuals whose skin test was not confounded by **vaccination**. An excellent agreement between the two tests was found (94%, kappa value 0.866), and in contrast to the blood test based on PPD, the novel blood test was not influenced by the **vaccination** status of the subjects tested.

L5 ANSWER 2 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 2004:211482 BIOSIS
DN PREV200400213609
TI Mapping immune reactivity toward Rv2653 and Rv2654: Two novel low-molecular-mass antigens found specifically in the Mycobacterium **tuberculosis** complex.
AU Aagaard, Claus [Reprint Author]; Brock, Inger; Olsen, Anja; Ottenhoff, Tom H. M.; Weldingh, Karin; **Andersen, Peter**
CS Dept. of Infectious Disease Immunology, Statens Serum Institute, Artillerivej 5, DK-2300, Copenhagen, Denmark
caa@ssi.dk
SO Journal of Infectious Diseases, (1 March 2004) Vol. 189, No. 5, pp. 812-819. print.
CODEN: JIDIAQ. ISSN: 0022-1899.
DT Article
LA English
ED Entered STN: 14 Apr 2004
Last Updated on STN: 14 Apr 2004
AB New tools are urgently needed for the detection of **latent tuberculosis** (TB). We evaluated the diagnostic potential of 2 novel Mycobacterium **tuberculosis** complex-specific candidate antigens (Rv2653 and Rv2654) and investigated T cell recognition during natural infection in humans and experimental infection in guinea pigs. Peripheral blood mononuclear cells stimulated with peptide pools covering the full length of Rv2654 induced interferon-gamma release in 10 of 19 patients with TB. Neither Rv2654 single peptides nor Rv2654 pools were recognized by bacille Calmette-Guerin-**vaccinated** donors. However, peptides from Rv2653 were recognized by both patients group. The cross-reactive epitope(s) in Rv2653 were located in a 36-amino acid stretch in the center of the molecule. Rv2654 also induced M. **tuberculosis**-specific skin-test responses in 3 of 4 aerosol-infected guinea pigs. Rv2654 is a strongly recognized T cell antigen that is highly specific for TB and has potential as a novel

cell-mediated immunity-based TB diagnostic agent.

L5 ANSWER 3 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 2003:244497 BIOSIS
DN PREV200300244497
TI Comparison of T-cell-based assay with tuberculin skin test for diagnosis of Mycobacterium **tuberculosis** infection in a school **tuberculosis** outbreak.
AU Ewer, Katie; Deeks, Jonathan; Alvarez, Lydia; Bryant, Gerry; Waller, Sue; **Andersen, Peter**; Monk, Philip; Lalvani, Ajit [Reprint Author]
CS Nuffield Department of Clinical Medicine, University of Oxford, John Radcliffe Hospital, Level 7, Oxford, OX3 9DU, UK
ajit.lalvani@ndm.ox.ac.uk
SO Lancet (North American Edition), (April 5 2003) Vol. 361, No. 9364, pp. 1168-1173. print.
ISSN: 0099-5355 (ISSN print).
DT Article
LA English
ED Entered STN: 21 May 2003
Last Updated on STN: 21 May 2003
AB Background: The diagnosis of **latent tuberculosis** infection relies on the tuberculin skin test (TST), which has many drawbacks. However, to find out whether new tests are better than TST is difficult because of the lack of a gold standard test for **latent** infection. We developed and assessed a sensitive enzyme-linked immunospot (ELISPOT) assay to detect T cells specific for Mycobacterium **tuberculosis** antigens that are absent from Mycobacterium bovis BCG and most environmental mycobacteria. We postulated that if the ELISPOT is a more accurate test of **latent** infection than TST, it should correlate better with degree of exposure to M. **tuberculosis**. Methods: A large **tuberculosis** outbreak in a UK school resulted from one infectious index case. We tested 535 students for M. **tuberculosis** infection with TST and ELISPOT. We compared the correlation of these tests with degree of exposure to the index case and BCG **vaccination**. Findings: Although agreement between the tests was high (89% concordance, kappa=0.72, p<0.0001), ELISPOT correlated significantly more closely with M. **tuberculosis** exposure than did TST on the basis of measures of proximity (p=0.03) and duration of exposure (p=0.007) to the index case. TST was significantly more likely to be positive in BCG-**vaccinated** than in non-**vaccinated** students (p=0.002), whereas ELISPOT results were not associated with BCG **vaccination** (p=0.44). Interpretation: ELISPOT offers a more accurate approach than TST for identification of individuals who have **latent tuberculosis** infection and could improve **tuberculosis** control by more precise targeting of preventive treatment.

L5 ANSWER 4 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 2001:559258 BIOSIS
DN PREV200100559258
TI Tuberculin skin testing compared with T-cell responses to Mycobacterium **tuberculosis**-specific and nonspecific antigens for detection of **latent** infection in persons with recent **tuberculosis** contact.
AU Arend, Sandra M. [Reprint author]; Engelhard, Anrik C. F.; Groot, Gertjan; de Boer, Kirsten; **Andersen, Peter**; Ottenhoff, Tom H. M.; van Dissel, Jaap T.
CS Dept. of Infectious Diseases, Leiden University Medical Center, C5P, 2300 RC, Leiden, Netherlands
s.m.arend@lumc.nl
SO Clinical and Diagnostic Laboratory Immunology, (November, 2001) Vol. 8, No. 6, pp. 1089-1096. print.
ISSN: 1071-412X.
DT Article
LA English
ED Entered STN: 5 Dec 2001
Last Updated on STN: 25 Feb 2002
AB The tuberculin skin test (TST) is used for the identification of **latent tuberculosis** (TB) infection (LTBI) but lacks

specificity in Mycobacterium bovis BCG-**vaccinated** individuals, who constitute an increasing proportion of TB patients and their contacts from regions where TB is endemic. In previous studies, T-cell responses to ESAT-6 and CFP-10, M. **tuberculosis**-specific antigens that are absent from BCG, were sensitive and specific for detection of active TB. We studied 44 close contacts of a patient with smear-positive pulmonary TB and compared the standard screening procedure for LTBI by TST or chest radiographs with T-cell responses to M. **tuberculosis**-specific and nonspecific antigens. Peripheral blood mononuclear cells were cocultured with ESAT-6, CFP-10, TB10.4 (each as recombinant antigen and as a mixture of overlapping synthetic peptides), M. **tuberculosis** sonicate, purified protein derivative (PPD), and short-term culture filtrate, using gamma interferon production as the response measure. LTBI screening was by TST in 36 participants and by chest radiographs in 8 persons. Nineteen contacts were categorized as TST negative, 12 were categorized as TST positive, and 5 had indeterminate TST results. Recombinant antigens and peptide mixtures gave similar results. Responses to TB10.4 were neither sensitive nor specific for LTBI. T-cell responses to ESAT-6 and CFP-10 were less sensitive for detection of LTBI than those to PPD (67 versus 100%) but considerably more specific (100 versus 72%). The specificity of the TST or in vitro responses to PPD will be even less when the proportion of BCG-**vaccinated** persons among TB contacts evaluated for LTBI increases.

L5 ANSWER 5 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 2000:349404 BIOSIS
DN PREV200000349404
TI Detection of active **tuberculosis** infection by T cell responses to early-secreted antigenic target 6-kDa protein and culture filtrate protein 10.
AU Arend, Sandra M. [Reprint author]; **Andersen, Peter**; van Meijgaarden, Krista E.; Skjot, Rikke L. V.; Subronto, Yanri W.; van Dissel, Jaap T.; Ottenhoff, Tom H. M.
CS Dept. of Infectious Diseases, C5P, Leiden University Medical Center, 2300 RC, Leiden, Netherlands
SO Journal of Infectious Diseases, (May, 2000) Vol. 181, No. 5, pp. 1850-1854. print.
CODEN: JIDIAQ. ISSN: 0022-1899.
DT Article
LA English
ED Entered STN: 16 Aug 2000
Last Updated on STN: 7 Jan 2002
AB The purified protein derivative (PPD) skin test has no predictive value for **tuberculosis** (TB) in Mycobacterium bovis bacillus Calmette-Guerin (BCG)-**vaccinated** individuals because of cross-reactive responses to nonspecific constituents of PPD. T cell responses to early-secreted antigenic target 6-kDa protein (ESAT-6) and the newly identified culture filtrate protein 10 (CFP-10), 2 proteins specifically expressed by M. **tuberculosis** (MTB) but not by BCG strains, were evaluated. Most TB patients responded to ESAT-6 (92%) or CFP-10 (89%). A minority of BCG-**vaccinated** individuals responded to both ESAT-6 and CFP-10, their history being consistent with **latent** infection with MTB in the presence of protective immunity. No responses were found in PPD-negative controls. The sensitivity and specificity of the assay were 84% and 100%, respectively, at a cutoff of 300 pg of interferon-gamma/mL. These data indicate that ESAT-6 and CFP-10 are promising antigens for highly specific immunodiagnosis of TB, even in BCG-**vaccinated** individuals.

L5 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:1030064 CAPLUS
TI Prospective evaluation of a whole-blood test using Mycobacterium **tuberculosis**-specific antigens ESAT-6 and CFP-10 for diagnosis of active **tuberculosis**
AU Ravn, Pernille; Munk, Martin E.; Andersen, Aase B.; Lundgren, Bettina; Lundgren, Jens D.; Nielsen, Lars N.; Kok-Jensen, Axel; **Andersen, Peter**; Weldingh, Karin
CS Department of Infectious Diseases, Hvidovre University Hospital, Hvidovre, 2650, Den.

SO Clinical and Diagnostic Laboratory Immunology (2005), 12(4), 491-496
CODEN: CDIMEN; ISSN: 1071-412X
PB American Society for Microbiology
DT Journal
LA English
AB A new immunodiagnostic test based on the Mycobacterium **tuberculosis**-specific antigens CFP-10/ESAT-6(QFT-RD1) has been launched as an aid in the diagnosis of **latent** **tuberculosis** (TB) infection (LTBI). The aim of this study was to evaluate this test for the diagnosis of active TB. Eighty-two patients with suspicion of TB and 39 healthy BCG-**vaccinated** persons were enrolled. Forty-eight had active TB, 25 did not, and 9 were excluded. Sensitivity and specificity of the test for active TB were evaluated in a prospective blinded manner in patients suspected of TB. The sensitivity of the QFT-RD1 was 85% (40/48; confidence interval [CI], 75 to 96), and it was higher than the sensitivity of microscopy, 42% (20/48; CI, 27 to 56; P = 0.001), and culture, 59% (27/46; CI, 44 to 73; P = 0.009). Of patients with extrapulmonary TB, 92% (12/13) were QFT-RD1 pos., whereas only 31% (4/13) were pos. by microscopy and 42% (5/12) by culture (P < 0.05), and 87% (13/15) of those who were neg. by both microscopy and culture were QFT-RD1 pos. By combining microscopy and culture with the QFT-RD1 test, sensitivity increased to 96% (CI, 90 to 102). Ten of 25 (40%) non-TB patients were QFT-RD1 pos., resulting in a specificity of 60%. However, 80% (8/10) of these had risk-factors for TB, indicating **latent** infection in this group. In healthy controls, only 3% (1/39) were QFT-RD1 pos. In conclusion, the QFT-RD1 test is sensitive for diagnosis of TB, especially in patients with neg. microscopy and culture. The accuracy of the QFT-RD1 test will vary with the prevalence of LTBI. We suggest that the QFT-RD1 test could be a very useful supplementary tool for the diagnosis of TB.
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:60336 CAPLUS
DN 140:144681
TI Mycobacterium low oxygen-induced antigens and genes for **vaccines** or diagnostics of **tuberculosis**
IN **Andersen, Peter**; Rosenkrands, Ida; Stryhn, Anette
PA Statens Serum Institut, Den.
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004006952	A2	20040122	WO 2003-DK477	20030708
	WO 2004006952	A3	20040318		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1523331	A2	20050420	EP 2003-763613	20030708
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2004057963	A1	20040325	US 2003-617038	20030711
PRAI	DK 2002-1098	A	20020713		
	US 2002-401725P	P	20020807		
	WO 2003-DK477	W	20030708		

AB The present invention is based on a number of M. **tuberculosis** derived proteins and protein fragments which are induced during the **latent** stage of infection characterized by low oxygen tension in

the microenvironment of the infecting TB-bacteria. The invention is directed to the use of these polypeptides, immunol. active fragments thereof and the genes encoding them for immunol. compns. such as therapeutic **vaccines** and diagnostic reagents.

L5 ANSWER 8 OF 9 MEDLINE on STN
AN 2005542775 IN-PROCESS
DN PubMed ID: 16218449
TI Replacing the tuberculin skin test with a specific blood test.
AU Weldingh Karin; **Andersen Peter**
CS Department of Infectious Disease Immunology, Statens Serum Institut, Artillerivej 5, 2300 Copenhagen S, Denmark.
SO Kekkaku : [Tuberculosis], (2005 Aug) 80 (8) 581-5.
Journal code: 0422132. ISSN: 0022-9776.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20051013
Last Updated on STN: 20051013
AB For almost 100 years has the tuberculin skin test (TST) been used for the support the diagnosis of active and **latent** TB infection. The TST test has, however, a number of limitations most notable low specificity in BCG **vaccinated** individuals due to cross-reactive components in PPD and the M. bovis BCG **vaccine** strain and an intensive search for new and more specific diagnostic antigens has therefore be ongoing. In this review we describe the discovery process leading to the identification of the M. **tuberculosis** specific antigens ESAT6 and CFP10; two low molecular weight proteins which are highly sensitive and specific for detection of a M. **tuberculosis** infection.

L5 ANSWER 9 OF 9 USPATFULL on STN
AN 2004:76186 USPATFULL
TI Therapeutic TB **vaccine**
IN **Andersen, Peter**, Bronshoj, DENMARK
Rosenkrands, Ida, Vaerlose, DENMARK
Stryhn, Anette, Virum, DENMARK
PI US 2004057963 A1 20040325
AI US 2003-617038 A1 20030711 (10)
PRAI DK 2002-1098 20020713
US 2002-401725P 20020807 (60)
DT Utility
FS APPLICATION
LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 6018
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Therapeutic **vaccines** comprising polypeptides expressed during the **latent** stage of mycobacteria infection are provided, as are multiphase **vaccines**, and methods for treating and preventing **tuberculosis**.

=> e rosenkrands ida/au
E1 1 ROSENKRANDS G/AU
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E3 61 --> ROSENKRANDS IDA/AU
E4 1 ROSENKRANDS JOHANNES W/AU
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E6 1 ROSENKRANDS P/AU
E7 1 ROSENKRANDS T/AU
E8 5 ROSENKRANDS V/AU
E9 1 ROSENKRANK MAGNUS/AU
E10 1 ROSENKRANS/AU
E11 1 ROSENKRANS A/AU

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E12          18      ROSENKRANS A M/AU

=> s e2-e3 and tuberculosis
L6          126 ("ROSENKRANDS I"/AU OR "ROSENKRANDS IDA"/AU) AND TUBERCULOSIS

=> s l6 and latent
L7            8 L6 AND LATENT

=> dup rem l7
PROCESSING COMPLETED FOR L7
L8            3 DUP REM L7 (5 DUPLICATES REMOVED)

=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L8   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:60336  CAPLUS
DN   140:144681
TI   Mycobacterium low oxygen-induced antigens and genes for vaccines or
     diagnostics of tuberculosis
IN   Andersen, Peter; Rosenkrands, Ida; Stryhn, Anette
PA   Statens Serum Institut, Den.
SO   PCT Int. Appl., 76 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
PI   WO 2004006952         A2    20040122    WO 2003-DK477            20030708
     WO 2004006952         A3    20040318
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     EP 1523331            A2    20050420    EP 2003-763613           20030708
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2004057963         A1    20040325    US 2003-617038           20030711
PRAI DK 2002-1098          A     20020713
     US 2002-401725P       P     20020807
     WO 2003-DK477         W     20030708
AB   The present invention is based on a number of M. tuberculosis
     derived proteins and protein fragments which are induced during the
     latent stage of infection characterized by low oxygen tension in
     the microenvironment of the infecting TB-bacteria.  The invention is
     directed to the use of these polypeptides, immunol. active fragments
     thereof and the genes encoding them for immunol. compns. such as
     therapeutic vaccines and diagnostic reagents.

L8   ANSWER 2 OF 3  USPATFULL on STN
AN     2004:76186  USPATFULL
TI     Therapeutic TB vaccine
IN     Andersen, Peter, Bronshoj, DENMARK
         Rosenkrands, Ida, Vaerlose, DENMARK
       Stryhn, Anette, Virum, DENMARK
PI     US 2004057963      A1   20040325
AI     US 2003-617038     A1   20030711 (10)
PRAI   DK 2002-1098        20020713
       US 2002-401725P     20020807 (60)
DT     Utility
FS     APPLICATION
LREP   HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321
```

NORRISTOWN ROAD, SPRING HOUSE, PA, 19477
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 6018
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Therapeutic vaccines comprising polypeptides expressed during the **latent** stage of mycobacteria infection are provided, as are multiphase vaccines, and methods for treating and preventing **tuberculosis**.

L8 ANSWER 3 OF 3 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 1
AN 2002:364515 BIOSIS
DN PREV200200364515
TI Hypoxic response of Mycobacterium **tuberculosis** studied by metabolic labeling and proteome analysis of cellular and extracellular proteins.
AU **Rosenkrands, Ida** [Reprint author]; Slayden, Richard A.; Crawford, Janne; Aagaard, Claus; Barry, Clifton E., III; Andersen, Peter
CS Department of TB Immunology, Statens Serum Institut, 5 Artillerivej, DK-2300, Copenhagen S, Denmark
idr@ssi.dk
SO Journal of Bacteriology, (July, 2002) Vol. 184, No. 13, pp. 3485-3491. print.
CODEN: JOBAAY. ISSN: 0021-9193.
DT Article
LA English
ED Entered STN: 3 Jul 2002
Last Updated on STN: 3 Jul 2002
AB The events involved in the establishment of a **latent** infection with Mycobacterium **tuberculosis** are not fully understood, but hypoxic conditions are generally believed to be the environment encountered by the pathogen in the central part of the granuloma. The present study was undertaken to provide insight into M. **tuberculosis** protein expression in in vitro latency models where oxygen is depleted. The response of M. **tuberculosis** to low-oxygen conditions was investigated in both cellular and extracellular proteins by metabolic labeling, two-dimensional electrophoresis, and protein signature peptide analysis by liquid chromatography-mass spectrometry. By peptide mass fingerprinting and immunodetection, five proteins more abundant under low-oxygen conditions were identified from several lysates of M. **tuberculosis**: Rv0569, Rv2031c (HspX), Rv2623, Rv2626c, and Rv3841 (BfrB). In M. **tuberculosis** culture filtrates, two additional proteins, Rv0363c (Fba) and Rv2780 (Ald), were found in increased amounts under oxygen limitation. These results extend our understanding of the hypoxic response in M. **tuberculosis** and potentially provide important insights into the physiology of the **latent** bacilli.

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E3          54 --> STRYHN ANETTE/AU
E4           4     STRYHN ANNETTE/AU
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L9         136 ("STRYHN A"/AU OR "STRYHN A *"/AU OR "STRYHN ANETTE"/AU OR "STRY
               HN ANNETTE"/AU)
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=> s l9 and tuberculosis
L10          9 L9 AND TUBERCULOSIS

=> dup rem l10
PROCESSING COMPLETED FOR L10
L11          4 DUP REM L10 (5 DUPLICATES REMOVED)

=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y


L11  ANSWER 1 OF 4  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
     DUPLICATE 1
AN   2005:303747  BIOSIS
DN   PREV200510092158
TI   Exchanging ESAT6 with TB10.4 in an Ag85B fusion molecule-based
     tuberculosis subunit vaccine: Efficient protection and ESAT6-based
     sensitive monitoring of vaccine efficacy.
AU   Dietrich, Jes [Reprint Author]; Aagaard, Claus; Leah, Robert; Olsen, Anja
     W.; Stryhn, Anette; Doherty, T. Mark; Andersen, Peter
CS   Statens Serum Inst, Dept Infect Dis Immunol, Artillerivej 5, DK-2300
     Copenhagen S, Denmark
     jdi@ssi.dk
SO   Journal of Immunology, (MAY 15 2005) Vol. 174, No. 10, pp. 6332-6339.
     CODEN: JOIMA3. ISSN: 0022-1767.
DT   Article
LA   English
ED   Entered STN: 15 Aug 2005
     Last Updated on STN: 15 Aug 2005
AB   Previously we have shown that Ag85B-ESAT-6 is a highly efficient vaccine
     against tuberculosis. However, because the ESAT-6 Ag is also an
     extremely valuable diagnostic reagent, finding a vaccine as effective as
     Ag85B-ESAT-6 that does not contain ESAT-6 is a high priority. Recently,
     we identified a novel protein expressed by Mycobacterium
     tuberculosis designated TB10.4. In most infected humans, TB10.4
     is strongly recognized, raising interest in TB10.4 as a potential vaccine
     candidate and substitute for ESAT-6. We have now examined the vaccine
     potential of this protein and found that vaccination with TB10.4 induced a
     significant protection against tuberculosis. Fusing Ag85B to
     TB10.4 produced an even more effective vaccine, which induced protection
     against tuberculosis comparable to bacillus Calmette-Guerin
     vaccination and superior to the individual Ag components. Thus,
     Ag85B-TB10 represents a new promising vaccine candidate against
     tuberculosis. Furthermore, having now exchanged ESAT-6 for
     TB10.4, we show that ESAT-6, apart from being an excellent diagnostic
     reagent, can also be used as a reagent for monitoring vaccine efficacy.
     This may open a new way for monitoring vaccine efficacy in clinical
     trials.

L11  ANSWER 2 OF 4  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:60336  CAPLUS
DN   140:144681
TI   Mycobacterium low oxygen-induced antigens and genes for vaccines or
     diagnostics of tuberculosis
IN   Andersen, Peter; Rosenkrands, Ida; Stryhn, Anette
PA   Statens Serum Institut, Den.
SO   PCT Int. Appl., 76 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     --------------      ----   --------    --------------------     --------
PI   WO 2004006952       A2     20040122    WO 2003-DK477            20030708
     WO 2004006952       A3     20040318
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
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RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1523331 A2 20050420 EP 2003-763613 20030708
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 2004057963 A1 20040325 US 2003-617038 20030711

PRAI DK 2002-1098 A 20020713
US 2002-401725P P 20020807
WO 2003-DK477 W 20030708

AB The present invention is based on a number of M. **tuberculosis** derived proteins and protein fragments which are induced during the latent stage of infection characterized by low oxygen tension in the microenvironment of the infecting TB-bacteria. The invention is directed to the use of these polypeptides, immunol. active fragments thereof and the genes encoding them for immunol. compns. such as therapeutic vaccines and diagnostic reagents.

L11 ANSWER 3 OF 4 USPATFULL on STN
AN 2004:76186 USPATFULL
TI Therapeutic TB vaccine
IN Andersen, Peter, Bronshoj, DENMARK
Rosenkrands, Ida, Vaerlose, DENMARK
Stryhn, Anette, Virum, DENMARK
PI US 2004057963 A1 20040325
AI US 2003-617038 A1 20030711 (10)
PRAI DK 2002-1098 20020713
US 2002-401725P 20020807 (60)
DT Utility
FS APPLICATION
LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 6018
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Therapeutic vaccines comprising polypeptides expressed during the latent stage of mycobacteria infection are provided, as are multiphase vaccines, and methods for treating and preventing **tuberculosis**

L11 ANSWER 4 OF 4 USPATFULL on STN
AN 2002:272793 USPATFULL
TI Recombinant antibodies from a phage display library, directed against a peptide-MHC complex
IN Andersen, Peter Sejer, Copenhagen, DENMARK
Buus, Soren, Bronshoj, DENMARK
Engberg, Jan, Copenhagen, DENMARK
Fugger, Lars, Copenhagen, DENMARK
Stryhn, Anette, Bronshoj, DENMARK
PA Kobenhavns Universitet (non-U.S. corporation)
PI US 2002150914 A1 20021017
AI US 2001-957113 A1 20010919 (9)
RLI Continuation of Ser. No. US 1998-981021, filed on 20 Mar 1998, ABANDONED A 371 of International Ser. No. WO 1996-DK296, filed on 1 Jul 1996, UNKNOWN
PRAI DK 1995-778 19950630
DK 1995-1214 19951030
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 1652

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to a method of producing an antibody or an antibody fragment specifically recognizing a peptide-MHC complex. It also relates to antibodies and antibody fragments according to the invention that are conjugated to a pharmaceutical or to a superantigen. The invention relates to a pharmaceutical composition comprising antibodies or antibody fragments a according to the invention for the prevention or treatment of infectious and autoimmune diseases, cancer and to compositions for the diagnosis of said diseases.

=> s tuberculosis and vaccin? and latent
L12 1068 TUBERCULOSIS AND VACCIN? AND LATENT

=> s l12 and fusion
L13 382 L12 AND FUSION

=> dup rem l13
PROCESSING COMPLETED FOR L13
L14 381 DUP REM L13 (1 DUPLICATE REMOVED)

=> s l14 and (tuberculosis/ti or tuberculosis/ab)
'AB' IS NOT A VALID FIELD CODE
'AB' IS NOT A VALID FIELD CODE
'AB' IS NOT A VALID FIELD CODE
L15 26 L14 AND (TUBERCULOSIS/TI OR TUBERCULOSIS/AB)

=> s l15 and (vaccin?/ti or vaccin?/ab)
'AB' IS NOT A VALID FIELD CODE
'AB' IS NOT A VALID FIELD CODE
'AB' IS NOT A VALID FIELD CODE
L16 13 L15 AND (VACCIN?/TI OR VACCIN?/AB)

=> s l16 and (latent/ti or latent/ab)
'AB' IS NOT A VALID FIELD CODE
'AB' IS NOT A VALID FIELD CODE
'AB' IS NOT A VALID FIELD CODE
L17 5 L16 AND (LATENT/TI OR LATENT/AB)

=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y

L17 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:397950 CAPLUS
DN 142:461885
TI Efficient ex vivo stimulation of Mycobacterium **tuberculosis** -specific T cells by genetically detoxified Bordetella pertussis adenylate cyclase antigen toxoids
AU Wilkinson, Katyalin A.; Simsova, Marcela; Schoelvinck, Elisabeth; Sebo, Peter; Leclerc, Claude; Vordermeier, H. Martin; Dickson, Stuart J.; Brown, Jillian R.; Davidson, Robert N.; Pasvol, Geoffrey; Levin, Michael; Wilkinson, Robert J.
CS Wellcome Trust Cent. for Res. in Clin. Tropical Med., Div. of med., Imp. Coll. London, Wright Fleming Inst., London, W2 1PG, UK
SO Infection and Immunity (2005), 73(5), 2991-2998
CODEN: INFIBR; ISSN: 0019-9567
PB American Society for Microbiology
DT Journal
LA English
AB Mycobacterium **tuberculosis** is a significant threat to global health. Mycobacterium bovis BCG **vaccine** provides only partial protection, and the skin test reagent used to aid diagnosis of both active and **latent tuberculosis**, purified protein derivative (PPD), lacks specificity and sensitivity. The use of genetically detoxified Bordetella pertussis adenylate cyclase toxin (CyaA) as a delivery system for two immunodominant proteins of M. **tuberculosis** that are of greater specificity than PPD, early-secreted antigenic target 6-kDa protein (ESAT-6) and culture filtrate protein 10 (CFP-10), was therefore investigated. CyaA toxoids incorporating these antigens were

able to restimulate T cells from more than 91% **tuberculosis** patients and healthy sensitized donors. Delivery of antigen by CyaA decreased by 10-fold the amount of ESAT-6 and CFP-10 required to restimulate T cells, and in low responders, the overall frequency of gamma interferon-producing cells detected by enzyme-linked immunospot assay was increased (for both antigens). Delivery of ESAT-6 and CFP-10 by CyaA enabled the detection of both CD4+ and CD8+ T cells: these responses could be blocked by inhibition of major histocompatibility complex class II or class I, resp. Covalent linkage of antigen to the CyaA vector was required for enhancement to occur, as a mixture of mock CyaA toxoid plus recombinant ESAT-6 did not lead to enhancement. In a simplified whole-blood model to detect **tuberculosis** infection, the frequency of pos. responses to CFP-10 was increased by CyaA delivery, a potentially important attribute that could facilitate the identification of **latent** infection.

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:60336 CAPLUS
DN 140:144681
TI Mycobacterium low oxygen-induced antigens and genes for **vaccines** or diagnostics of **tuberculosis**
IN Andersen, Peter; Rosenkrands, Ida; Stryhn, Anette
PA Statens Serum Institut, Den.
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004006952	A2	20040122	WO 2003-DK477	20030708
WO 2004006952	A3	20040318		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1523331	A2	20050420	EP 2003-763613	20030708
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004057963	A1	20040325	US 2003-617038	20030711
PRAI DK 2002-1098	A	20020713		
US 2002-401725P	P	20020807		
WO 2003-DK477	W	20030708		

AB The present invention is based on a number of M. **tuberculosis** derived proteins and protein fragments which are induced during the **latent** stage of infection characterized by low oxygen tension in the microenvironment of the infecting TB-bacteria. The invention is directed to the use of these polypeptides, immunol. active fragments thereof and the genes encoding them for immunol. compns. such as therapeutic **vaccines** and diagnostic reagents.

L17 ANSWER 3 OF 5 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN
AN 2005268387 EMBASE
TI The use of animal models to guide rational **vaccine** design.
AU Orme I.M.
CS I.M. Orme, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO 80523, United States.
ian.orme@colostate.edu
SO Microbes and Infection, (2005) Vol. 7, No. 5-6, pp. 905-910.
Refs: 30

ISSN: 1286-4579 CODEN: MCINFS
PUI S 1286-4579(05)00096-1
CY France
DT Journal; General Review
FS 004 Microbiology
015 Chest Diseases, Thoracic Surgery and Tuberculosis
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
ED Entered STN: 20050714
Last Updated on STN: 20050714
AB Although there are several varieties of animal models of **tuberculosis**, the mouse and the guinea pig are by far the most validated and useful. These provide information about **vaccine** -induced protection, immunogenicity, toxicity, and immunopathological effects. There is still much to be learned, however, in terms of rational **vaccine** design, especially in the context of therapeutic or anti- **latent vaccine** formulations and animal models of these situations.

L17 ANSWER 4 OF 5 USPATFULL on STN
AN 2004:76186 USPATFULL
TI Therapeutic TB **vaccine**
IN Andersen, Peter, Bronshoj, DENMARK
Rosenkrands, Ida, Vaerlose, DENMARK
Stryhn, Anette, Virum, DENMARK
PI US 2004057963 A1 20040325
AI US 2003-617038 A1 20030711 (10)
PRAI DK 2002-1098 20020713
US 2002-401725P 20020807 (60)
DT Utility
FS APPLICATION
LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 6018
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Therapeutic **vaccines** comprising polypeptides expressed during the **latent** stage of mycobacteria infection are provided, as are multiphase **vaccines**, and methods for treating and preventing **tuberculosis**.

L17 ANSWER 5 OF 5 USPATFULL on STN
AN 97:120735 USPATFULL
TI DNA encoding stationary phase, stress response sigma factor from Mycobacterium **tuberculosis**
IN Bishai, William R., Baltimore, MD, United States
Young, Douglas B., London, United Kingdom
Zhang, Ying, Baltimore, MD, United States
DeMaio, James, Tacoma, WA, United States
PA The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)
PI US 5700925 19971223
AI US 1996-622353 19960327 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Swartz, Rodney P.
LREP Cushman Darby & Cushmam IP Group of Pillsbury Madison & Sutro
CLMN Number of Claims: 6
ECL Exemplary Claim: 2
DRWN 6 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 858
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB SigF is a gene that controls M. **tuberculosis** latency. A diagnostic test for **latent tuberculosis** involves

detecting M. **tuberculosis** sigF in clinical specimens. A **tuberculosis vaccine** includes a M. **tuberculosis** strain with a mutation which disrupts the reading frame of its sigF gene.